

REMARKS***Introduction***

Receipt of the Office Action mailed July 17, 2006 is acknowledged. Submitted herewith is a concurrent request for a 2 month extension of time for response.

By way of the instant response, the claims have been amended to recite plate products comprising an alloy *inter alia* comprising Cu from 3.8-4.2 and about 300 ppm Sc. Support for the claim amendments can be found throughout the specification and claims as originally filed as well as in the examples. All claims directed to sheets have accordingly been canceled without prejudice or disclaimer. No new matter has been added.

Entry of the present proposed amendment under 37 CFR 1.116 is earnestly solicited since the instant amendment is believed to place this application in condition for allowance or at least reduce issues for appeal. Moreover, the presently submitted Declaration of Dr. Bes could not have easily been presented any earlier since test data was needed and the outstanding issues were just identified during an interview with the Examiner held recently. In the Declaration of Dr. Bes, the use of a paragraph number '6' was inadvertently omitted.

Entry of the present amendment pursuant to 37 CFR 1.116, and favorable reconsideration are earnestly solicited.

The Interview

Applicants and their Representatives gratefully acknowledge the courtesies extended to them during an interview conducted recently at the USPTO. During the interview, the outstanding rejections and current claims were discussed.

Claim Rejections - 35 USC § 103

Claims 1, 3-14, 17, 18, 21, 23, 24, 26-28, 30, 31, 33-37, 39-44, 46-51, 53-60, 62-70, 72-81, 83-92, 106 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Rioja (US 6,562,154). This rejection is respectfully traversed for at least the following reasons.

First of all, the claims have been amended to be directed to plates, and claims directed to sheets have been deleted. Rioja only teaches alloys for sheets. In this regard, the Examiner has already admitted that Rioja only teaches his alloy being used for aircraft fuselages (abstract). The Rioja alloy is stated as being formed into a sheet from up to 0.35 inch thick (9mm). Rioja does not mention a plate product (wherein the specification describes a plate product as “typically of the order of 12 to 25 mm” [0029]). Contrary to the Examiner’s conclusory statement, it would not have been obvious to one of ordinary skill in the art to form the Al-Cu-Mg alloy taught by Rioja into plate stock on the order of 12 mm thick used for lower wing skins for many reasons, including those set forth by Dr. Bes in his Declaration submitted herewith.

Moreover, the claims have also been amended to more specifically recite the Cu and Sc ranges. Thus, the teaching of 3.7% Cu by Rioja is not within the claimed range of 3.8-4.2% Cu. Further, the instant recitation of “about 300 ppm” Sc is not taught or suggested by Rioja’s disclosure of 0.06% Sc. Indeed, the Examiner stated in the Office Action that the only reason why a *prima facie* case of obviousness was apparently present previously was, “[b]ecause Rioja teaches an example within the presently claimed alloying ranges and very close the instant range of Sc (within one hundredth of a percent).” Since the present claims now specify Sc being about 300 ppm, this position previously submitted by the Examiner is no longer tenable. In view of the more specific recitation with regard to Sc and Cu in claim 1, the rejection based on Rioja is not proper and should be withdrawn.

In addition, submitted herewith is a Declaration Under 1.132 by Dr. Bernard Bes, a named inventor of the present application. In Dr. Bes’s Declaration, it has been shown that surprising and unexpected results have been found in connection with the present invention and criticality with respect to the claimed ranges have also been demonstrated. That is, Dr. Bes has

determined that his results demonstrate that the tensile yield strength of a product according to the present application having the stated Sc, Zr and Cu quantities is about 15% higher than sample 310 of Rioja, while Kapp (W=16") is about 17% higher for the present application samples. It is Dr. Bes's opinion as one of skill in the art, that the results he reports in his Declaration show that plates having a thickness of at least about 12 mm and formed of an alloy having Sc, Cu and Zr as claimed, provides surprising and unexpected results as compared with Rioja. Further, he submits that the values and compositions he tested also demonstrate the criticality of these aspects with regard to the present claimed invention.

In the July 17 Office Action, the Examiner relied upon the claims being obvious because, "Applicant has not shown unexpected results with respect to said example that meets the instant ranges of Cu, Mn, Mg, Zr, Fe, and Si; but is outside the instant range of Sc by one hundredth of a percent (and therefore is expected to have substantially identical properties)." By way of the instantly submitted Declaration and amended claim features regarding Cu and Sc, reconsideration of this position taken by the Examiner is respectfully urged.

Conclusion

In view of the above proposed amendment and foregoing remarks, Applicants respectfully submit that all claims are now in condition for allowance and earnestly solicit an early indication from the Examiner to that effect.

If there are any questions regarding this response or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

Applicants submit herewith the fee of \$450.00 to cover the two month extension of time via credit card authorization. However, if an additional fee is due, please charge our Deposit Account No. 11-0553, under Order No. 2901683.4 from which the undersigned is authorized to draw.

Dated: December 18, 2006

Respectfully submitted,

By /Susan E. Shaw McBee/

Susan E. Shaw McBee

Registration No. 39,294

Kening Li, Ph.D.

Registration No. 44,872

Baker, Donelson, Bearman, Caldwell, & Berkowitz, P.C.

555 11th Street, NW, 6th Floor

Washington, DC 20004

Direct: 202.508.3479

Fax: 202.220.2279

Attorneys for Applicant